

ABSTRACT OF THE DISCLOSURE

The present invention provides a router device capable of using separated queues with arbitrary fineness and flexibly achieving assurance and separation of traffic. Flow identifier 2 detects a flow of packets input to the device. Flow monitor 1 detects color information indicating match (Green) of actual traffic to a previously defined bandwidth under contract for each flow, temporal violation (Yellow), or complete violation (Red). Forwarding searcher 3 determines, from contents of a packet, output line information indicating from which line the packet is to be output. In-device packet controller 4 adds in-device cell header information to a packet input thereto, converts it into a form in the device (an in-device cell), and sends it to input side in-device cell buffer 5.